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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,175	09/04/2001	Nobuhiko Ogura	Q65952	9850
7590 07/18/2005			EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC			TRAN, MY CHAU T	
2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3202			ART UNIT	PAPER NUMBER
			1639	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/944,175	OGURA, NOBUHIKO			
Office Action Summary	Examiner	Art Unit			
	MY-CHAU T. TRAN	1639			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on <u>03 May 2005</u> .					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1,2,4-8 and 10-22</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1,2,4-8 and 10-22</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10)⊠ The drawing(s) filed on is/are: a)□ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some * c) None of:					
<ul><li>1. Certified copies of the priority documents have been received.</li><li>2. Certified copies of the priority documents have been received in Application No</li></ul>					
Copies of the certified copies of the priority documents have been received in Application No      Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	Paper No(s)/Mail D				
U.S. Patent and Trademark Office	ction Summary Pa	art of Paper No./Mail Date 20050630			

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/03/2005 has been entered.

## Application and Claims Status

- 2. Applicant's amendment and response filed 05/03/2005 and 02/03/2005 is acknowledged and entered. Claim 1 has been amended.
- 3. Claims 3 and 9 were canceled; and Claims 1, 4, 10-11, and 22 were amended by the amendment filed on 1/12/2004.
- 4. Claims 23-41 are canceled by the amendment filed on 12/4/2002.
- 5. Claims 1-2, 4-8, and 10-22 are pending.

## **Priority**

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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7. This instant application claims benefit to a foreign application, Japan 2000-267449 filed 09/04/2000, under 35 U.S.C 119(a)-(d). This instant application is granted the benefit of foreign priority under 35 U.S.C 119(a)-(d) for foreign application, Japan 2000-267449 filed 09/04/2000.

8. Claims 1, 2, 4-8, and 10-22 are treated on the merit in this Office Action.

## Claim Rejections - 35 USC § 112

9. Claims 1, 2, 4-8, and 10-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed had possession of the claimed invention. (This is a new matter rejection.)

The instant invention recites a biochemical analyzing method. The method comprises the step of (a) fixing probes selected in advance on a substrate; (b) binding a target with the probes using a specific binding reaction to capture the target; (c) fractionating the captured target to produce a fractionated target; (d) detecting only the fractionated target; and (e) quantitatively analyzing the detected target, wherein the probes are spotted on the substrate and fixed thereon, and the respective captured targets are electrophoresed, thereby being fractionated, wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight.

The recitation of 'wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight' claimed in claim 1, have no clear support in

the specification and the claims as originally filed. The specification disclosure states the following: 1) on page 22, "As a result, the combined bodies of the cDNAs and the DNA probes are electrophoresed in the gel block 23, thereby being moved in the depth direction of the gel block 23 and are three-dimensionally distributed in accordance with the molecular weight thereof, whereby the spots 26 are fractionated" (lines 7-11); 2) on page 41, line 25 thru page 42, line 2, "More specifically, when voltage is applied from the direct current source 53 to the gel block 53 so as to cross it, the combined bodies of cDNAs and probe DNAs contained in the membrane filters 54 are electrophoresed in the gel block 52 to be moved in the depth direction of the gel block 52 and three-dimensionally distributed in the gel block 52 in accordance with the molecular weight thereof'; and 3) on page 43, "As a result, the combined bodies of cDNAs and probe DNAs are electrophoresed in the capillaries 64 to be moved in the longitudinal direction of the capillaries 64 and are distributed in the longitudinal direction of the capillaries 64 in accordance with the molecular weight thereof, thereby being fractionated" (line 9-13). These disclosures are not support for the claimed limitation of 'wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight' of claim 1. Because the specification recites that the complex form from the probe and target, i.e. "the combined bodies of the cDNAs and the DNA probes", are fractionated into fraction, it does not support the limitation of claim 1, which recites that only the target is fractionated into fraction, i.e. 'during the fractionating, the captured target is separated into a plurality of fractions'.

Therefore, the scope of the invention as originally disclosed in the specification would not encompass the scope of the limitation of 'wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight'.

If applicants disagree, applicant should present a detailed analysis as to why the claimed subject matter has clear support in the specification.

10. Claims 1, 2, 4-8, and 10-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. (This is a written description rejection.)

The instant invention recites a biochemical analyzing method. The method comprises the step of (a) fixing probes selected in advance on a substrate; (b) binding a target with the probes using a specific binding reaction to capture the target; (c) fractionating the captured target to produce a fractionated target; (d) detecting only the fractionated target; and (e) quantitatively analyzing the detected target, wherein the probes are spotted on the substrate and fixed thereon, and the respective captured targets are electrophoresed, thereby being fractionated, wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight.

The specification disclosure does not sufficiently teach the claimed method wherein the target is bind (captured) to the probe that is attached to the substrate (fixed onto the substrate) and the target is electrophoresed into plurality of fractions based on molecular weight. The specification description is directed to the method wherein the cDNAs are spotted onto the substrate and the labeled DNA probes are hybridized to the cDNAs that are spotted on the substrate (see pg. 20, lines 25-28; pg. 40, line 25 thru pg. 41, line 5; pg. 42, lines 16-25). The

combined bodies of the cDNA and the probe DNA are electrophoresed into plurality of fractions based on molecular weight (see pg. 22, lines 7-11; pg. 41, line 25 thru pg. 42 line 2; pg. 43, lines 9-13). The specification description also disclosed a method using the known Southern blotting method wherein the gel support and a transfer support are stacked to transfer at least a part of the denatured DNA fragments onto the transfer support and the transferred DNA fragments are fixed on the transfer support by heating and irradiating with an ultraviolet ray (see pg. 22, line 28 thru pg. 23, line 4). The labeled DNA or RNA probes are hybridized to the DNA fragments on the transfer support and unbound probes are removed by washing (see pg. 23, lines 5-20). This method clearly does not provide an adequate representation regarding the claimed method wherein the target is bind (captured) to the probe that is attached to the substrate (fixed onto the substrate) and the target is electrophoresed into plurality of fractions based on molecular weight. Thus the specification does not teach the claimed method wherein the target is bind (captured) to the probe that is attached to the substrate is bind (captured) to the probe that is attached to the substrate on the target is bind (captured) to

<u>Vas-Cath Inc. v. Mahurkar</u>, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See page 1116.).

With the exception of the method wherein the probe and target are hybridized on the substrate and the complexes of probe-target are electrophoresed into plurality of fractions based

on molecular weight disclosed by the specification, the skilled artisan cannot envision the claimed method wherein the target is bind (captured) to the probe that is attached to the substrate (fixed onto the substrate) and the target is electrophoresed into plurality of fractions based on molecular weight. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it. See <u>Fiers v. Revel</u>, 25 USPQ2d 1601, 1606 (CAFC 1993) and <u>Amgen Inc. V. Chugai Pharmaceutical Co. Ltd.</u>, 18 USPQ2d 1016. In <u>Fiddes v. Baird</u>, 30 USPQ2d 1481, 1483, claims directed to mammalian FGF's were found unpatentable due to lack of written description for the broad class. The specification provided only the bovine sequence.

Finally, <u>University of California v. Eli Lilly and Co.</u>, 43 USPQ2d 1398, 1404, 1405 held that:

...To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) (" [T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." Lockwood, 107 F.3d at 1572, 41 USPQ2d at 1966.

In the present instance, the specification does not teach the claimed method wherein the target is bind (captured) to the probe that is attached to the substrate (fixed onto the substrate) and the target is electrophoresed into plurality of fractions based on molecular weight.

Therefore, only the method wherein the probe and target are hybridized on the substrate and the complexes of probe-target are electrophoresed into plurality of fractions based on molecular weight, but not the full breadth of the claim method meet the written description provision of 35 U.S.C 112, first paragraph.

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## Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 12. Claims 1-2, 4-6, and 10-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Mosaic Technologies ("Mosaic") (WO 98/51,823).

Mosaic discloses several methods of analyzing target molecules that specifically binds to the nucleic acid probes, which are immobilized to an electrophoretic medium by electrophoresis (see e.g. pg. 3, lines 8-30). The electrophoretic medium comprises a matrix (substrate). The capture probes are immobilized (spotted) to the matrix in several different formats such as a one-dimensional array, two-dimensional array, and three-dimensional array (see e.g. pg. 10, lines 1-7; pgs. 22-24; fig. 2 B, C, and D). Additionally, multiple different capture probes are immobilized on the matrix to create a multiplex hybridization assay (see e.g. pg. 10, lines 1-7;pg. 23, lines 6-27; fig. 2 B, C, and D). In general method comprises 1) immobilizing capture probes to the matrix wherein the probe specifically bind to the target molecule and demonstrate the presence or absence of the target molecule (see e.g. pg. 5, lines 28-32; pg. 13, line 29 to pg. 14, line 3) (refers to fixing probes in advance on a substrate); 2) binding the target molecules to the capture probes (see e.g. pg. 5, lines 28-32; pg. 25, lines 15-21) (refers to binding the target with the

probe); 3) electrophoresing the non-target molecule out of the matrix (see e.g. pg. 25, lines 21-26) (refers to fractioning the captured target); and 4) detecting the immobilized target molecule bound to the capture probe by a label such as fluorescent or chemiluminescent label (see e.g. pg. 29, lines 15-22). The target can be labeled prior to binding to the capture probe (see e.g. pg. 30, lines 20-29) or after the target is fractionated (see e.g. pg. 30, lines 30-34). Additionally, the detectable signals are optically detected by optically scanning the arrays such as a one-dimensional array, two-dimensional array, and three-dimensional array (see e.g. pg. 31, line 15 to pg. 32, line 14) (refers to quantitative analysis of the detected target). Thus the method of Mosaic anticipates the presently claimed method.

13. Claims 1, 2, 10, 11, and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Nelson et al. (US Patent 6,344,326 B1).

Nelson et al. disclose the devices and methods for high throughput electrophoretic immunoassay (see e.g. Abstract; col. 2, line 53 thru col. 3, line 5; col. 4, line 19-33). In one method and device, the device comprises an enrichment channel, an electrophoretic flowpath, and serial array of affinity zones (see e.g. col. 17, lines 35-67; fig. 16). The method comprises the steps of a) concentrating and/or purifying DNA fractions of interest in a crude cell lysate in the enrichment channel; b) the eluted fraction passes into the electrophoretic flowpath and are fractionated to produce fractions wherein each fraction comprises DNA fragments of different lengths and base composition; c) these fractions are passed into the affinity zones wherein the target DNA present in the fraction that is complementary to the probe in one of the affinity zones will be bound in that affinity zone; and d) detecting and quantifying a signal such as fluorescent

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from the components bound in the affinity zones (see e.g. col. 17, lines 39-57). Thus, the method of Nelson et al. anticipates the presently claimed method.

#### Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 1-2, 4-8, and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosaic Technologies ("Mosaic") (WO 98/51,823) and Briggs et al. (US Patent 5,560,811).

Mosaic discloses several methods of analyzing target molecules that specifically binds to the nucleic acid probes, which are immobilized to an electrophoretic medium by electrophoresis (see e.g. pg. 3, lines 8-30). The electrophoretic medium comprises a matrix (substrate). The capture probes are immobilized (spotted) to the matrix in several different formats such as a one-dimensional array, two-dimensional array, and three-dimensional array (see e.g. pg. 10, lines 1-7; pgs. 22-24; fig. 2 B, C, and D). Additionally, multiple different capture probes are immobilized on the matrix to create a multiplex hybridization assay (see e.g. pg. 10, lines 1-7;pg. 23, lines 6-27; fig. 2 B, C, and D). In general method comprises 1) immobilizing capture probes to the matrix wherein the probe specifically bind to the target molecule and demonstrate the presence or absence of the target molecule (see e.g. pg. 5, lines 28-32; pg. 13, line 29 to pg. 14, line 3) (refers to fixing probes in advance on a substrate); 2) binding the target molecules to the capture probes (see e.g. pg. 5, lines 28-32; pg. 25, lines 15-21) (refers to binding the target with the

probe); 3) electrophoresing the non-target molecule out of the matrix (see e.g. pg. 25, lines 21-26) (refers to fractioning the captured target); and 4) detecting the immobilized target molecule bound to the capture probe by a label such as fluorescent or chemiluminescent label (see e.g. pg. 29, lines 15-22). The target can be labeled prior to binding to the capture probe (see e.g. pg. 30, lines 20-29) or after the target is fractionated (see e.g. pg. 30, lines 30-34). Additionally, the detectable signals are optically detected by optically scanning the arrays such as a one-dimensional array, two-dimensional array, and three-dimensional array (see e.g. pg. 31, line 15 to pg. 32, line 14) (refers to quantitative analysis of the detected target).

The method of Mosaic does not expressly disclose the step wherein the targets are electrophoresed in a plurality of capillaries.

Briggs et al. disclose a method of multiplexing electrophoresis analysis with an array of capillary electrophoresis columns (see e.g. Abstract; col. 3, line 66 to col. 4, line 3; fig. 4C). The method comprises using fluorescence detection of target species in capillary electrophoresis (see e.g. col. 1, line 66 to col. 2, line 11; col. 15, lines 6-46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the step wherein the targets are electrophoresed in a plurality of capillaries as taught by Briggs et al. in the method of Mosaic. One of ordinary skill in the art would have been motivated to include the step wherein the targets are electrophoresed in a plurality of capillaries in the method of Mosaic for the advantage of providing a binding assay system wherein multiple samples can be analyzed in parallel and uses small volumes (Briggs: col. 6, line 66 to col. 7, line 9) since both Mosaic and Briggs et al. disclose the method of fluorescence detection of target species by capillary electrophoresis (Mosaic: pg. 8, lines 30-34,

and pg. 29, lines 15-22; Brigg: col. 1, line 66 to col. 2, line 11). Furthermore, one of ordinary skill in the art would have reasonably expectation of success in the combination of Mosaic and Briggs et al. because the method of Mosaic would need no modification other than increasing the number of capillaries in order to electrophorese the targets, would not materially affect the method steps.

#### Response to Arguments

16. Applicant's arguments filed 05/03/2005 regarding the new matter issue as suggested in the Advisory Action mailed 04/01/2005 for the newly added limitation 'wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight' have been fully considered but they are not persuasive.

Applicant contends that this limitation are fully supported in the instant specification such as page 22, lines 7-11, page 41, line 25 to page 42, line 2, and page 43, lines 9-13. Therefore, the newly added limitation is fully supported by the instant specification.

Applicant's arguments are not convincing since the newly added limitation, 'wherein during the fractionating, the captured target is separated into a plurality of fractions based on molecular weight', is not fully supported by the instant specification. The supports cited by applicant refers to the "combined bodies of the cDNAs and the DNA probes", i.e. the complex form from the DNA probe and DNA target, that are fractionated into fraction, it does not support the newly added limitation, which recites that only the target is fractionated into fraction, as discussed in paragraph 9 above.

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17. Applicant's argument filed 02/03/2005 directed to the rejection under 35 USC 102(b) as being anticipated by Mosaic Technologies ("Mosaic") (WO 98/51,823) for claims 1-2, 4-6, and 10-22 was considered but they are not persuasive for the following reasons.

Applicant argues that the reference of Mosaic does not anticipate the presently claimed method because the reference of Mosaic does not teach or suggest fractionating the target wherein the target is separated into a plurality of fractions based on molecular weight.

Therefore, the reference of Mosaic does not anticipate the presently claimed method.

Applicant's arguments are not convincing since the reference of Mosaic does anticipate the presently claimed method. First, the plain meaning of the word "fractionate" involves breaking down or separating into some kinds of fractions would encompasses the method of Mosaic, wherein the sample comprising the target are electrophoresed such that the target that are complimentary to the immobilized probe are capture, i.e. the target binds to the probe, and non-complimentary target molecules pass through (see fig. 1). Thus, the method produces fractions of bound and unbound target. Second, the reference of Mosaic does disclose the method wherein the target is separated into a plurality of fractions based on molecular weight. Mosaic discloses the method wherein multiple different capture probes are immobilized on the matrix to create a multiplex hybridization assay (see e.g. pg. 10, lines 1-7;pg. 23, lines 6-27; fig. 2 B, C, and D). That is probes of different length and base composition are immobilized and the target that are complimentary to the immobilized probe are capture, which would produce target is separated into a plurality of fractions based on molecular weight. Thus, the reference of Mosaic does disclose the method wherein the target is separated into a plurality of fractions based on molecular weight, and the rejection is maintained.

18. Applicant's argument filed 02/03/2005 directed to the rejection under 35 USC 103(a) as being unpatentable over Mosaic Technologies ("Mosaic") (WO 98/51,823) and Briggs et al. (US Patent 5,560,811) for claims 1-2, 4-8, and 10-22 was considered but they are not persuasive for the following reasons.

Applicant alleges that the method combination of Mosaic Technologies ("Mosaic") and Briggs et al. is not obvious over the presently claimed method because neither Mosaic nor Briggs et al. teach the method of fractionating the target wherein the target is separated into a plurality of fractions based on molecular weight. Thus, the method combination of Mosaic Technologies ("Mosaic") and Briggs et al. is not obvious over the presently claimed method.

Applicant's arguments are not convincing since the method combination of Mosaic Technologies ("Mosaic") and Briggs et al. is obvious over the presently claimed method. First, the plain meaning of the word "fractionate" involves breaking down or separating into some kinds of fractions would encompasses the method of Mosaic, wherein the sample comprising the target are electrophoresed such that the target that are complimentary to the immobilized probe are capture, i.e. the target binds to the probe, and non-complimentary target molecules pass through (see fig. 1). Thus, the method produces fractions of bound and unbound target. Second, the reference of Mosaic does disclose the method wherein the target is separated into a plurality of fractions based on molecular weight. Mosaic discloses the method wherein multiple different capture probes are immobilized on the matrix to create a multiplex hybridization assay (see e.g. pg. 10, lines 1-7; pg. 23, lines 6-27; fig. 2 B, C, and D). That is probes of different length and base composition are immobilized and the target that are complimentary to the immobilized probe are capture, which would produce targets separated into a plurality of fractions based on

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molecular weight. Thus, the method combination of Mosaic Technologies ("Mosaic") and Briggs et al. is obvious over the presently claimed method, and the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Chau T. Tran whose telephone number is 571-272-0810. The examiner can normally be reached on Monday: 8:00-2:30; Tuesday-Thursday: 7:30-5:00; Friday: 8:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mct

July 11, 2005

PADMAŠHRI PONNALURI